

#### Abstract of the Disclosure

A method for producing a light-emitting semiconductor component having a thin-film layer sequence (14), in which a photon-emitting active zone (17) is formed. The thin-film layer sequence (14) is formed on a growth substrate. A reflection contact layer (40) is formed having contact with the thin-film layer sequence. A diffusion barrier layer (42) is applied to the reflection contact layer (40), and a solder contact layer (44) is applied to the diffusion barrier layer (42). The reflection contact layer (40), after it has been formed and before the diffusion barrier layer (42) is applied, is subjected to heat treatment for the purpose of producing an ohmic contact, and the surface of the reflection contact layer (40) is cleaned with a first etching solution after the heat treatment. As an alternative, the reflection contact layer (40) is subjected to heat treatment after the application of the solder contact layer (44) to the diffusion barrier layer (42) for the purpose of producing an ohmic contact.